

SECTION I

CONFORMITY REQUIREMENTS AND FINDINGS

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PREFACE

The federally required conformity analyses and findings for the Draft 2004 Regional Transportation Improvement Program (RTIP) set forth in the following sections.

The conformity sections cover all federally required analyses for the conformity determination of the Draft 2004 RTIP. All transportation and air quality conformity analyses in this document are in compliance with applicable law, including the Environmental Protection Agency (EPA) - Transportation Conformity Rule (40 CFR Parts 51 and 93) and the U. S. Department of Transportation's Transportation Equity Act for the 21st Century (TEA- 21, Planning Regulations). This Technical Appendix contains three sections that specifically address the conformity analysis required for federal approval.

- **Conformity Requirements**

This section reflects all of the conformity requirements and highlights the required conformity findings.

- **Modeling - Summary for Regional Emissions Analyses**

This section provides the modeling methodologies and assumptions employed in the conformity determination of the 2004 RTP regional emissions with the respective Air Quality Management Plan (AQMP)/State Implementation Plan (SIP) or based on the build/no-build tests.

- **Timely Implementation of Transportation Control Measures (TCMs)**

This section highlights the conformity findings of the Timely Implementation of TCMs and describes the implementation status of all applicable TCMs in the South Coast Air Basin (SCAB) and the Ventura County portion of the South Central Coast Air Basin (SCCAB).

Conformity Status of Current RTIP and RTP

On October 4, 2002, the federal agencies approved funding and determined conformity of the 2002 RTIP. The federal funding approval of the 2002 RTIP will expire on October 4, 2004. The Draft 2004 RTIP is based on the 2004 RTP and implements the projects and programs included in the fiscal years (2004/05 – 2009/10) of the 2004 RTP. Upon its funding approval and conformity determination by the federal agencies, the 2004 RTIP will replace the 2002 RTIP.

The 2004 RTP has two federal conformity determination dates. On June 7, 2004, the federal conformity determination was issued for the following non-attainment and maintenance areas:

- South Coast Air Basin (SCAB – Ozone, CO, NO₂, and PM₁₀)
- San Bernardino County portion of the Mojave Desert Air Basin (MDAB – PM₁₀)
- Coachella Valley portion of the Salton Sea Air Basin (SSAB - PM₁₀)

- Imperial County portion of SSAB (Ozone and PM10)

The federal conformity determination for the Ventura County portion of the South Central Coast Air Basin (SCCAB – ozone) and the Southeast Desert Modified ozone area is expected to be issued by the federal agencies by the end of June 2004.

CONFORMITY REQUIREMENTS AND FINDINGS

Introduction

The Southern California Association of Governments (SCAG), the Metropolitan Planning Organization (MPO) for Southern California, is mandated to comply with Federal and State transportation and air quality regulations.

Federal transportation and air quality regulations are outlined in the Transportation Equity Act for the Twenty-first Century (TEA-21) and the Federal Clean Air Act (CAA). The TEA-21 authorizes Federal funding for highway, highway safety, transit, and other surface transportation programs. The CAA establishes air quality standards for various health-hazardous pollutants.

California State requirements for air quality management are incorporated into the State Implementation Plans (SIP) for those pollutants stipulated in the CAA. The SIPs set forth the goals and objectives for achieving CAA air-quality standards.

State and Federal Requirements

Federal Non-Attainment and Maintenance Areas

The Environmental Protection Agency (EPA) may make a Federal “non-attainment area” designation to any area that has not met CAA health standards for one or more pollutants. A non-attainment area designation may require additional air-quality controls for transportation plans, programs, and projects.

State Implementation Plans (SIP)

To comply with the CAA in achieving the National Ambient Air Quality Standards (NAAQS), the California Air Resources Board (ARB) develops SIPs for federal non-attainment and maintenance areas. In California, SIP development is a joint effort of the local air agencies and ARB working with federal, state, and local agencies (including the MPOs). Local Air Quality Management Plans (AQMPs) are prepared in response to federal and state requirements.

The SIP includes two important factors for transportation and air quality conformity analysis – emissions budgets and Transportation Control Measures (TCM). Emissions budgets set an upper limit which transportation activities (the motor vehicles also known as on-road mobile sources) are permitted to emit. TCMs are strategies to reduce emissions from on-road mobile sources.

ARB recommends the federal non-attainment area boundaries to EPA for final designations. Subsequently, the EPA finalizes and defines the boundaries of the federally designated non-attainment areas for each criteria pollutant, as defined below. In general, each federal non-attainment area should be in one air basin. However, in the SCAG region, one federal non-attainment area known as the Southeast Desert Modified area for the 1-hour ozone standard covers portions of two air basin areas. In California, the state legislature defines the air basins.

Federal Transportation Conformity Rule

In compliance with the CAA requirements, the Transportation Conformity Rule establishes regulatory provisions for processing transportation plans, programs, and projects in non-attainment areas under Title 23 U.S.C., the Federal Transit Act, and Section 176(c) of the 1990 CAA Amendments. The Rule also regulates conformity to the SIPs.

The first complete Transportation Conformity Rule was published in November 1993 and has been amended three times. The most recent Transportation Conformity Rule is found at 40 CFR parts 51 and 93. Since its last publication, two court cases have changed parts of the Transportation Conformity Rule. The U.S. Court of Appeals November 4, 1997 ruling in *Sierra Club v. EPA* deleted the grace period for the non-attainment area designation and the U.S. Court of Appeals March 2, 1999 ruling in *EDF v. EPA* held that submitted emission budgets to EPA cannot be used for conformity determinations. The applicable emissions budgets should have EPA's approval or adequacy finding for conformity determination.

On June 14, 2004, EPA released the conformity amendments. The amendments provide transportation conformity regulations for the new 8-hour ozone and PM_{2.5} National Ambient Air Quality Standards (NAAQs), incorporate the U.S. Court of Appeals decision, streamline and clarify some the existing conformity rules.

Regional Transportation Planning Processes

2004 Regional Transportation Improvement Program (RTIP)

TEA-21 requires that SCAG develop a Regional Transportation Plan (RTP) for a 20-year minimum period. Additionally, SCAG must develop a Regional Transportation Improvement Program (RTIP) to implement the RTP. In the federal non-attainment or maintenance areas, the RTP and RTIP must comply with the transportation conformity requirements of the EPA Transportation Conformity Rule.

The biennial RTIP update is produced on an even-year cycle. In this cycle, the 2004 RTIP was developed in tandem with the 2004 RTP and most of the related conformity analyses in the RTP and RTIP are consistent. Also, the standard biennial RTIP cycle is consistent with the State Transportation Improvement Program (STIP) cycle. The 2004 STIP in the SCAG

region was incorporated into the Draft 2004 RTIP for conformity analysis. The federal funding approval of the current operating 2002 RTIP expires on October 4, 2004.

Criteria Pollutants and Air Basins

Criteria Pollutants

Transportation activities, particularly motor vehicles (on-road mobile sources), are major causes of air pollution. Four criteria pollutants are subject to air quality conformity for the RTP and RTIP:

- Carbon Monoxide (CO) is a product of automobile exhaust. CO reduces the flow of oxygen in the bloodstream and is particularly dangerous to persons with heart disease.
- Ozone is formed by the reaction between Volatile Organic Compounds (VOC) and Oxides of Nitrogen (NO_x) in the presence of sunlight. Ozone negatively impacts the respiratory system.
- Nitrogen Dioxide (NO₂) is created under the high pressure and temperature conditions in internal combustion engines. It impacts the respiratory system and degrades visibility due to its brownish color.
- Particulate matter less than 10 microns in size (PM₁₀) are tiny particles of dust and soot that cause irritation and damage to the respiratory system.

Air Basins and Air Districts in the SCAG Region

Federal non-attainment areas are usually described by their air basin geographies. SCAG is a six-county region that contains four air basins (administered by five air districts):

- The South Coast Air Basin (SCAB) covers the urbanized portions of the Los Angeles, Riverside, and San Bernardino counties as well as the entire county of Orange and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD).
- The Ventura County portion of the South Central Coast Air Basin (VC/SCCAB) covers Ventura County and is within the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD).
- The Mojave Desert Air Basin (MDAB) covers the desert portions of Los Angeles, Riverside, and San Bernardino counties. A small portion of this air basin is in Kern County and outside of the SCAG region. The SCAG portion of this air basin is under the jurisdiction of three air districts:

- The Mojave Desert Air Quality Management District (MDAQMD) administers portions of the MDAB situated in San Bernardino County and eastern Riverside County. The Riverside County portion is known as the Palo Verde Valley Area.
 - The South Coast Air Quality Management District (SCAQMD) administers the portion of MDAB in Riverside County situated between the Salton Sea Air Basin (SSAB) and the Palo Verde Valley Area.
 - The Antelope Valley Air Quality Management District (AVAQMD) administers the Los Angeles County portion of the MDAB.
- The Salton Sea Air Basin (SSAB) covers all Imperial County and the eastern desert portion of Riverside County (excluding the MDAB portion). This air basin is under jurisdiction of two air districts:
- The Imperial County Air Pollution Control District (ICAPCD) administers the Imperial County portion of the SSAB.
 - The South Coast Air Quality Management District (SCAQMD) administers the Riverside County portion of the SSAB situated between the SCAB and the MDAB.

(The boundaries of the air basins and air districts are illustrated in Exhibit A)

Non-Attainment/Maintenance Area Boundaries

Non-Attainment/Maintenance Areas and Timeframes

The boundaries of the Federal non-attainment/maintenance areas [and their respective attainment years] in the SCAG region are as follows:

- SCAB - The entire basin is a non-attainment or maintenance area for the following pollutants: CO [2000]; 1-hour Ozone [2010]; NO₂ [1995]; and PM₁₀ [2006].
- Ventura County Portion of SCCAB - The entire county is a non-attainment area for 1-hour Ozone [2005].
- Antelope Valley Portion of MDAB - The entire desert portion of Los Angeles County (known as Antelope Valley) is a non-attainment area for 1-hour Ozone [2007].
- San Bernardino County Portion of MDAB -
 - With the exception of the northern and eastern parts of the County the rest is a non-attainment area for 1-hour Ozone [2007].
 - Searles Valley (situated in the NW part of the County) is non-attainment for PM₁₀ [1994].

- San Bernardino County (excluding the Searles Valley area) within the MDAB is a non-attainment area for PM₁₀ [2000].
- The Riverside County Portion of SSAB - The entire Riverside County portion of SSAB (Coachella Valley) is a non-attainment area for the following pollutants: 1-hour Ozone [2007]; PM₁₀ [2006].
- Note: The 1-hour ozone non-attainment area known as the Southeast Desert Modified area is composed of the three pieces:
 - The Antelope Valley portion of MDAB
 - The San Bernardino County portion of MDAB
 - The Coachella Valley portion of SSAB
- The Imperial County Portion of SSAB - The entire Imperial County portion of SSAB is designated as the 1-hour ozone transitional area.

With the exception of a small area in the eastern part of Imperial County, the rest of the county is designated as a PM₁₀ non-attainment area [1994]. On October 9, 2003, the 9th U.S. District Court in *Sierra Club v. EPA* ordered EPA to reclassify Imperial County to “Serious”. The federal, state, and local air agencies are working together to interpret the Court requirements.

Boundary Changes

In September 2003, EPA took action and aligned the federal non-attainment areas with the California air basin boundaries in SCAB and the Coachella Valley area. The Banning Pass area was included in the SCAB area and excluded from the Coachella Valley area. The 2003 AQMPs/SIPs for the SCAB area as well as the 2003 PM₁₀ AQMP/SIP for the Coachella Valley area were developed using the new boundaries. Also, the new AQMP for the Coachella Valley portion of the Southeast Desert Modified Ozone Area was developed using the new boundaries. SCAG’s regional emissions analyses for the 2004 RTP and the Draft 2004 RTIP were based on the new boundaries.

Eight-Hour Ozone Non-attainment Areas

On April 15, 2004, EPA announced the new non-attainment areas for 8-hour ozone standard. The designation and classification were effective on June 15, 2004. The 8-hr ozone attainment years are between 2007 and 2021.

The SCAG region has five 8-hour ozone non-attainment areas and the overall boundaries for both one-hour and eight-hour ozone standards are the same (see Exhibit A - maps). SCAG’s new 8-hr ozone non-attainment areas and their classifications and maximum attainment dates are listed in the following table.

SCAG Region – Eight Hour Ozone Non-attainment Areas

| Non-attainment Area | Classification | Maximum Attainment Date |
|---|----------------|-------------------------|
| South Coast Air Basin (SCAB) | Severe-17 | 2021 |
| Coachella Valley – Salton Sea Air Basin (SSAB) | Serious | 2013 |
| Western Portion of Mojave Desert Air Basin (MDAB) [San Bernardino County and Antelope Valley] | Moderate | 2010 |
| Ventura County – South Central Coast Air Basin (SCCAB) | Moderate | 2010 |
| Imperial County (SSAB) | Marginal | 2007 |

The air districts and the California Air Resource Board (ARB) will have three years, until 2007, to submit the new Ozone Air Quality Management Plans (AQMPs)/ State Implementation Plans (SIPs) to EPA.

(The boundaries of federal non-attainment areas are illustrated in Exhibit A).

SIPs and Transportation Conformity

In California, all SIPs have to go through three steps: air district action, ARB action, and finally EPA action. Each air district submits its respective AQMPs/SIPs to ARB. ARB is the official State agency that submits the SIPs to EPA for all federal non-attainment and maintenance areas in California.

The Draft 2004 RTIP must conform to the applicable SIPs [emissions budgets and the Transportation Control Measures (TCMs)]. The March 1999 court ruling (*Sierra Club v. EPA*) required that conformity findings be based on the emissions budgets approved or found adequate by EPA. The applicable TCMs are those approved by EPA.

On April 26, 2002, the California Air Resources Board committed to update its emission factor model (EMFAC model) and the related SIPs in compliance with the latest planning assumption requirements. On May 3, 2002, the California Division of the Federal Highway Administration (FHWA) informed the State and the MPOs that from January 1, 2003 all conformity determinations must be based on the use of the new planning assumptions, including the new EMFAC model.

On April 1, 2003, EPA approved the EMFAC 2002 Model. The EMFAC 2002 Model must be used for development of the new SIPs (new emissions budgets) and conformity determination. SCAG's regional emissions analysis for the 2004 RTP/RTIP is based on the new emissions budgets and use of the EMFAC 2002 model.

Applicable Emissions Budgets

The new SIPs are based on the 2003 or 2004 Air Quality Management Plans (AQMPs) that were prepared by the respective air districts in association with ARB and SCAG. For the Draft 2004 RTIP conformity determination, the applicable emissions budgets and TCMs are established in the following SIPs:

- **SIPs for the SCAB area:** The 2003 AQMPs/SIPs for 1-hour Ozone, CO, Nitrogen Dioxide, and PM₁₀ were approved by SCAQMD and ARB on August 1, 2003 and October 23, 2003 respectively. EPA's adequacy finding on the emissions budgets for conformity determination in the SCAB area was published in Federal Register Vol. 69, No. 58 - Thursday, March 25, 2004.
- **1-hour Ozone SIP for the Southeast Desert Modified area:** The area is composed of three pieces: the Antelope Valley portion of MDAB, the San Bernardino County portion of MDAB, and the Coachella Valley portion of SSAB. Each provides its data to ARB and it is the responsibility of ARB to provide a single set of emission budgets (Ozone SIP). On May 4, 2004, ARB submitted the new Ozone SIP to EPA for final action. EPA's adequacy finding on the emissions budgets for conformity determination was published in Federal Register Vol. 69, No. 104 on Friday, May 28, 2004.
- **1-hour Ozone SIP for the Ventura County portion of SCCAB:** The Ventura County Air Pollution Control District (VCAPCD) adopted the 2004 Ozone AQMP (new emission budgets). On April 21, 2004 ARB submitted the new Ozone SIP to EPA for final action. EPA's adequacy finding on the emissions budgets for conformity determination was published in Federal Register Vol. 69, No. 104 on Friday, May 28, 2004.
- **PM₁₀ SIP for Coachella Valley portion of SSAB:** The emissions budgets established in the 2003 PM₁₀ SIP for the Coachella Valley portion of SSAB function as the applicable emissions budgets for conformity analysis. The new emissions budgets were approved by SCAQMD and ARB on August 1, 2003 and October 23, 2003 respectively. EPA's adequacy finding on the emissions budgets for conformity determination in the Coachella Valley PM₁₀ area was published in Federal Register Vol. 69, No. 58 on Thursday, March 25, 2004.

There are no SIPs for the other federal non-attainment/maintenance areas in the SCAG region.

In absence of the applicable emissions budgets for conformity, SCAG has to conduct a build/no-build test for regional emissions analysis of the 2004 RTIP. The following areas are subject to the build/no-build tests:

- Imperial County (SSAB) - the PM10 and Ozone non-attainment areas
- San Bernardino County (MDAB) - the PM10 non-attainment area
- Searles Valley area (MDAB) - the PM10 non-attainment area

Note: On October 9, 2003, the 9th U.S. District Court in Sierra Club v. EPA ordered EPA to reclassify Imperial County to “Serious”. ICAPCD, ARB, and EPA are working together to interpret the Court requirements. In the absence of any emissions budgets, SCAG conducts its regional emissions analysis for conformity finding based on the build/ no-build tests.

Emissions Budgets Tables

A summary of the applicable emissions budgets by pollutant by years of analysis (milestone, attainment, and planning horizon years) is presented in the following tables:

South Coast Air Basin (SCAB)

| Ozone Emissions Analysis (tons/day) | | | | | | |
|--|--------|-------------|-------------|-------------|-------------|-------------|
| SCAB - Summer Temperatures | | | | | | |
| Ozone Precursor | | 2005 | 2008 | 2010 | 2020 | 2030 |
| ROG (VOC) | Budget | 263 | 216 | 155 | 155 | 155 |
| NO _x | Budget | 546 | 464 | 352 | 352 | 352 |

Emissions budgets generated using EMFAC 2002 [attainment year 2010]

| Nitrogen Dioxide (NO₂) Emissions Analysis (tons/day) | | | | | |
|--|--------|-------------|-------------|-------------|-------------|
| SCAB - Winter Temperatures | | | | | |
| NO₂ Precursor | | 2003 | 2010 | 2020 | 2030 |
| NO _x | Budget | 686 | 686 | 686 | 686 |

Emissions Budgets generated using EMFAC 2002 [attainment year 1995]

| Carbon Monoxide (CO) Emissions Analysis (tons/day) | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|
| SCAB - Winter Temperatures | | | | | |
| CO | 2002 | 2005 | 2010 | 2020 | 2030 |
| Budget | 3,361 | 3,361 | 3,361 | 3,361 | 3,361 |

Emissions Budgets generated using EMFAC 2002 [attainment year 2000]

| Particulate Matter (PM₁₀) Emissions Analysis (tons/day) | | | | | | |
|---|--------|------|------|------|------|------|
| SCAB - Annual Average Temperatures | | | | | | |
| PM ₁₀ Precursor | | 2003 | 2006 | 2010 | 2020 | 2030 |
| ROG (VOC) | Budget | 311 | 251 | 251 | 251 | 251 |
| NO _x | Budget | 635 | 549 | 549 | 549 | 549 |
| Primary (PM) | Budget | 168 | 166 | 166 | 166 | 166 |

Emissions budgets generated using EMFAC 2002 [attainment year 2006]

Ventura County - South Central Coast Air Basin (VC/SCCAB)

| Ozone (tons/day) | | | | | |
|---|--------|------|------|------|------|
| Summer Temperatures SCCAB-Ventura County | | | | | |
| Ozone Precursors | | 2005 | 2010 | 2020 | 2030 |
| ROG (VOC) | Budget | 14.3 | 14.3 | 14.3 | 14.3 |
| NO _x | Budget | 21.4 | 21.4 | 21.4 | 21.4 |

Emissions budgets generated using EMFAC 2002 [2005 – attainment year]

Southeast Desert Modified Area

[Mojave Desert Air Basin / Salton Sea Air Basin (MDAB/SSAB)]

| Ozone (tons/day) | | | | | | |
|---|--------|------|------|------|------|------|
| Summer Temperatures Southeast Desert Modified Area (MDAB/SSAB) * | | | | | | |
| Ozone Precursor | | 2005 | 2007 | 2010 | 2020 | 2030 |
| ROG | Budget | 26.5 | 23.2 | 23.2 | 23.2 | 23.2 |
| NO _x | Budget | 68.3 | 63.2 | 63.2 | 63.2 | 63.2 |

Emissions budgets generated using EMFAC 2002 [attainment year 2007]

(*) This federally designated Ozone non-attainment area covers three separate but contiguous areas: The Antelope Valley portion of MDAB, the San Bernardino County portion of MDAB, and the Coachella Valley portion of SSAB. For conformity purposes, ARB provided SCAG with a single set of emissions budgets for this ozone non-attainment area.

Salton Sea Air Basin (SSAB)

| Particulate Matter (PM₁₀) Emissions Analysis (tons/day) | | | | | |
|---|------|------|------|------|------|
| Annual Average Temperatures SSAB - Riverside County (Coachella Valley) | | | | | |
| PM ₁₀ | 2003 | 2006 | 2010 | 2020 | 2030 |
| Budget | 12.3 | 10.9 | 10.9 | 10.9 | 10.9 |

Emissions budgets generated using EMFAC 2002 [attainment year – 2006]

Applicable TCMs

The SIP documents for the applicable TCMs are listed below:

- **SCAB** - The TCM categories established in the 1997 (as amended in 1999) Ozone AQMP / SIP for SCAB function as the applicable TCMs for the conformity finding (timely implementation of TCM analysis).

The TCM categories in the 2003 Ozone AQMP/SIP (submitted to EPA for final approval) are consistent with the TCM1 categories listed in the 1997 Ozone AQMP/SIP. Upon its approval by EPA, the TCM categories in the 2003 Ozone AQMP/SIP will replace those listed in the 1997/1999 Ozone AQMP/SIP.

- **The Ventura County portion of SCCAB** - The TCM strategies incorporated in the 1994 (as amended in 1995) Ozone AQMP/SIP function as the applicable TCMs for conformity finding (timely implementation of TCM analysis).

The 2004 Ozone AQMP/SIP was prepared to address the new motor vehicle emissions budgets. No changes were made to the TCM strategies listed in the 1994 (as amended in 1995) Ozone AQMP/SIP.

There are no applicable TCMs in any other federal non-attainment or maintenance areas in the SCAG region. For more information on TCMs and timely implementation of the TCMs, see Section III of this document.

SIP Status in Other Areas

- **Searles Valley Portion of MDAB (PM10)**

At the present time, there is no federally approved SIP for this area. The MDAQMD has requested re-designation of the Trona portion of the Searles Valley PM10 non-attainment area to attainment status. There are no projects in this area and the area has not experienced a federal exceedance for more than 10 years.

- **San Bernardino County Portion of MDAB (PM10)**

At the present time, there is no federally approved SIP for this area. MDAQMD is seeking EPA approval to make a "Clean Data Finding" for this area.

- **Imperial County Portion of SSAB (PM10)**

On October 9, 2003, the 9th U.S. District Court in Sierra Club v. EPA ordered EPA to reclassify Imperial County to "Serious". ICAPCD, ARB, and EPA are working together to interpret the Court requirements and its time frame. At the present time, there is no applicable SIP for this PM10 non-attainment area.

➤ **Imperial County Portion of SSAB (Ozone)**

The ozone non-attainment area in the Imperial County portion of SSAB is designated as a transitional area and there is no need for AQMP or SIP development.

Conformity Analysis and Findings

Required Transportation Conformity Analyses

Under the U.S. DOT Metropolitan Planning Regulations and EPA's Transportation Conformity Rule requirements, SCAG's Draft 2004 RTIP needs to pass five tests.

- Consistency with SCAG's RTP
(23 CFR, Section 450.324 of the U.S. DOT Metropolitan Planning Regulations)
This test is required for a TIP whether or not the planning area is a non-attainment/ maintenance area. In the federal non-attainment/ maintenance areas, a TIP must comply with the required conformity tests.
- Regional Emission Analysis
(40 CFR, Sections 93.109, 93.110, 93.118, and 93.119)
- Timely Implementation of Transportation Control Measures (TCMs) Analysis
(40 CFR, Section 93.113)
- Financial Constraint Analysis
(40 CFR, Section 93.108 and 23 CFR, Section 450.324)
- Interagency Consultation and Public Involvement Analysis
(40 CFR, Sections 93.105, 93.112 and 23 CFR, Section 450.324)

Regional Emissions Analyses

EPA's Transportation Conformity Rule requires that the Draft 2004 RTIP regional emissions be consistent with the motor vehicle emissions budgets in the applicable SIPs (Section 93.118). Consistency with emissions budgets must be demonstrated for each year for which the applicable emissions budgets are established, for the transportation planning horizon year, and for any milestone years as necessary so that the years for which consistency is demonstrated are no more than ten years apart.

On April 15, 2004, EPA designated the 8-hour ozone non-attainment areas thus making the conformity requirements applicable within a year of the non-attainment designation (April 2005). The ozone non-attainment boundaries for 1-hr and 8-hr standards are consistent in the SCAG region. Therefore, the 1-hour ozone regional emissions analysis and conformity finding for the 2004 RTIP will serve also for the 8-hr ozone standard once the conformity requirements become effective.

Summary of the 2004 RTIP Regional Emissions Analyses

As mandated by the Conformity Rule, to pass a regional emissions test for a conformity finding, the test must meet one of the following requirements:

- For the budget test, the regional emissions must be equal to or less than the emissions budgets.
- For the PM₁₀ build/no-build test, the build scenario's emissions must be less than the no-build scenario's emissions or the build scenario's emissions must be less than the year 1990.
- For the carbon monoxide (CO) build/no-build test, the build scenario's emissions must be less than the no-build scenario's emissions. Additionally, the future year emissions must be less than the 1990 base year emissions.
- For the Ozone build/no-build test, the build scenario's emissions must be less than the no-build scenario's emissions and additionally the future year emissions must be less than the 1990 base year emissions. For the areas that are not required to submit a SIP (marginal and below ozone non-attainment areas), the conformity demonstration is based on using either a build/no-build test or no greater than 1990 test (Transportation Conformity Rule - Preamble Section IV- Conformity Tests for Areas that are not required to submit SIPs). This part is applicable to Imperial County.

Note:

SCAG's regional emissions analysis for the Draft 2004 RTIP covers more than 20 years (the planning horizon year is 2030). It includes all projects programmed in the six-year RTIP and those included in the federally approved and conforming 2004 RTP.

The build scenario means implementing the RTIP (RTP) and the no-build scenario means not implementing the RTIP (RTP).

SCAG modeling methodologies and regional emissions analyses are described in Section II - Regional Emissions Analysis, of this document.

A summary of the SCAG-produced regional emissions analyses (conformity findings) is tabulated in the following tables, which are organized by air basin geography.

South Coast Air Basin (SCAB)

| Ozone Emissions Analysis (tons/day) | | | | | | |
|-------------------------------------|-----------------|---------|---------|---------|---------|---------|
| SCAB - Summer Temperatures | | | | | | |
| Ozone Precursor | | 2005 | 2008 | 2010 | 2020 | 2030 |
| ROG (VOC) | Budget | 263.000 | 216.000 | 155.000 | 155.000 | 155.000 |
| | Draft 2004 RTIP | 258.645 | 212.754 | 151.250 | 107.458 | 73.127 |
| NO _x | Budget | 546.000 | 464.000 | 352.000 | 352.000 | 352.000 |
| | Draft 2004 RTIP | 543.617 | 453.749 | 349.205 | 184.411 | 120.829 |

Regional emissions budget generated using EMFAC 2002. To pass, RTIP emissions must be equal to or less than budget [2010 – attainment year]

| Nitrogen Dioxide (NO ₂) Emissions Analysis (tons/day) | | | | | |
|---|-----------------|---------|---------|---------|---------|
| SCAB - Winter Temperatures | | | | | |
| NO ₂ Precursor | | 2005 | 2010 | 2020 | 2030 |
| NO _x | Budget | 686.000 | 686.000 | 686.000 | 686.000 |
| | Draft 2004 RTIP | 615.150 | 448.728 | 205.751 | 132.980 |

Regional emissions generated using EMFAC 2002. To pass, RTIP emissions must be equal to or less than budget. [1995 - attainment year]

| Carbon Monoxide (CO) Emissions Analysis (tons/day) | | | | |
|--|-----------|-----------|----------|----------|
| SCAB - Winter Temperatures | | | | |
| CO | 2005 | 2010 | 2020 | 2030 |
| Budget | 3,361.00 | 3,361.00 | 3,361.00 | 3,361.00 |
| Draft 2004 RTIP | 2,599.563 | 1,809.119 | 861.870 | 529.810 |

Regional emissions generated using EMFAC 2002. To pass, RTIP emissions must be equal to or less than budget. [2000 – attainment year]

| Particulate Matter (PM ₁₀) Emissions Analysis (tons/day) | | | | | |
|--|-----------------|---------|---------|---------|---------|
| SCAB - Annual Average Temperatures | | | | | |
| PM ₁₀ Precursor | | 2006 | 2010 | 2020 | 2030 |
| ROG (VOC) | Budget | 251.000 | 251.000 | 251.000 | 251.000 |
| | Draft 2004 RTIP | 245.489 | 188.955 | 106.671 | 72.495 |
| NO _x | Budget | 549.000 | 549.000 | 549.000 | 549.000 |
| | Draft 2004 RTIP | 535.147 | 417.906 | 192.882 | 125.738 |
| Primary (PM) | Budget | 166.000 | 166.000 | 166.000 | 166.000 |
| | Draft 2004 RTIP | 165.673 | 163.003 | 161.225 | 163.911 |

Regional emissions generated using EMFAC 2002. To pass, RTIP emissions must be equal to or less than budget. [2006 – attainment year]

Ventura County - South Central Coast Air Basin (VC/SCCAB)

| Ozone (tons/day) Summer Temperatures SCCAB-Ventura County | | | | | |
|--|-----------------|--------|--------|--------|--------|
| Ozone Precursors | | 2005 | 2010 | 2020 | 2030 |
| ROG (VOC) | Budget | 14.300 | 14.300 | 14.300 | 14.300 |
| | Draft 2004 RTIP | 14.230 | 10.680 | 6.170 | 4.160 |
| NO _x | Budget | 21.400 | 21.400 | 21.400 | 21.400 |
| | Draft 2004 RTIP | 21.280 | 15.170 | 6.830 | 4.350 |

Regional emissions generated using EMFAC 2002. To pass, RTIP emissions must be equal to or less than budget. [2005 – attainment year]

Mojave Desert Air Basin (MDAB)

| Particulate Matter (PM₁₀) Emissions Analysis (tons/day) Annual Average Temperatures MDAB San Bernardino County (excluding Searles Valley) | | | | |
|---|-------|-------|--------|--------|
| Particulate Matter (PM10) | 2005 | 2010 | 2020 | 2030 |
| Build (Plan) | 7.837 | 8.844 | 10.836 | 12.987 |
| No-build (Baseline) | 7.875 | 9.067 | 10.966 | 13.264 |

Regional emissions generated using EMFAC 2002. To pass, build emission must be less than no-build (baseline) – [2000 –attainment year]

Southeast Desert Modified Area

Mojave Desert Air Basin / Salton Sea Air Basin (MDAB/SSAB)

| Ozone (tons/day) Summer Temperatures MDAB/SSAB * (Southeast Desert Modified Area) | | | | | | |
|--|-----------------|--------|--------|--------|--------|--------|
| Ozone Precursor | | 2005 | 2007 | 2010 | 2020 | 2030 |
| ROG | Budget | 26.500 | 23.200 | 23.200 | 23.200 | 23.200 |
| | Draft 2004 RTIP | 23.110 | 20.362 | 16.690 | 9.934 | 8.168 |
| NO _x | Budget | 68.300 | 63.200 | 63.200 | 63.200 | 63.200 |
| | Draft 2004 RTIP | 64.528 | 59.624 | 51.075 | 24.193 | 17.479 |

Regional emissions generated using EMFAC 2002. To pass, RTIP emissions must be equal or less than budget. [2007 – attainment year]

Note (*): This federally designated Ozone non-attainment area covers three separate but contiguous areas: The Antelope Valley portion of MDAB, the San Bernardino County portion of MDAB, and the Coachella Valley portion of SSAB. The conformity analyses for NO_x and ROG are based on comparing SCAG's regional transportation emissions with a single set of the emissions budgets for all three parts provided to SCAG by ARB.

Salton Sea Air Basin (SSAB)

| Particulate Matter (PM₁₀) Emissions Analysis (tons/day) Annual Average Temperatures SSAB - Riverside County (Coachella Valley) | | | | |
|--|--------|--------|--------|--------|
| PM10 | 2006 | 2010 | 2020 | 2030 |
| Budget | 10.900 | 10.900 | 10.900 | 10.900 |
| Draft 2004 RTIP | 9.099 | 9.446 | 10.056 | 10.677 |

Regional emissions generated using EMFAC 2002. To pass, RTIP emissions must be equal to or less than budget. [2006 – attainment year]

| Ozone Emissions Analysis (tons/day) Summer Temperatures SSAB - Imperial County | | | | | |
|---|-------------------|--------|--------|-------|-------|
| Ozone Precursor | | 2005 | 2010 | 2020 | 2030 |
| ROG (VOC) | Build (RTIP/Plan) | 8.845 | 7.220 | 5.610 | 5.690 |
| | No-build | 8.856 | 7.240 | 5.620 | 5.710 |
| NO _x | Build (RTIP/Plan) | 12.720 | 11.790 | 8.880 | 7.790 |
| | No-build | 12.722 | 11.791 | 8.890 | 7.820 |

Regional emissions generated using EMFAC 2002. To pass, in the marginal and below ozone non-attainment areas, the conformity demonstration is based on using either build/no-build test or no greater than 1990 test. In a build/no-build test, the first analysis year must be no more than five years beyond the year in which the conformity determination is being made.[Section 93.119 (e)]

| Particulate Matter (PM₁₀) Emissions Analysis (tons/day) Annual Average Temperatures Imperial County | | | | |
|---|-------|-------|-------|--------|
| PM10 | 2005 | 2010 | 2020 | 2030 |
| Build (RTIP/Plan) | 5.574 | 6.334 | 7.798 | 9.610 |
| No-build | 5.716 | 6.451 | 8.432 | 10.393 |

Regional emissions generated using EMFAC 2002. To pass, build emission must be less than no-build. In build/no-build test, the first analysis year must be no more than five years beyond the year in which the conformity determination is being made [Section 93.119 (e)]

Searles Valley Area

The Searles Valley planning area is situated in the northwest part of San Bernardino County and is not a populated area. The area is designated as the federal non-attainment area for PM10. This area is a part of the Mojave Desert Air Basin (MDAB).

There are no proposed projects or programs in the 2004 RTP/RTIP for transportation improvements in the Searles Valley area. The projects population changes are insignificant during the 2004 RTP timeframe (including the RTIP period), between 2004 and 2030. Therefore, there are no differences between emissions in the build and no-build scenarios. Also, the future emissions are not less than the year 1990 emissions. The vehicle miles traveled

(VMT) in this area is composed of the local traffic and the through traffic (Route 178, connecting Kern County through San Bernardino County to Inyo County). There is a very small increase in traffic, about 1.45% per decade, due to through traffic.

Construction-Related PM₁₀ Emissions

Section 93.122(d)(2) of the EPA Transportation Conformity Rule requires that in PM₁₀ non-attainment and maintenance areas (for which the SIPs identify construction-related fugitive dust as a contributor to the area problem), the RTIP should conduct the construction-related fugitive PM₁₀ emission analysis. In the SCAG region, there are five PM₁₀ non-attainment areas:

- SCAB
- The Coachella Valley portion of SSAB
- The San Bernardino County portion (excluding Searles Valley) of the MDAB
- The Searles Valley portion of MDAB
- The Imperial County portion of SSAB

Of the above outlined non-attainment areas, only the first three areas are subject to the Transportation Conformity Rule requirements.

The 2003 PM₁₀ SIPs/AQMPs emissions budgets for SCAB and the Coachella Valley portion of SSAB include the construction and unpaved-road emissions. The Draft 2004 RTIP PM₁₀ regional emissions analysis includes the construction and unpaved road emissions for all three areas (SCAB, Coachella Valley and San Bernardino County) for conformity finding.

Conformity Determinations

SCAG has made the following conformity findings for the Draft 2004 RTIP under the required Federal tests.

✓ Consistency with 2004 RTP Test

- Finding: SCAG's Draft 2004 RTIP (project listing) is consistent with the 2004 RTP (policies, programs, and projects).

✓ Regional Emissions Tests

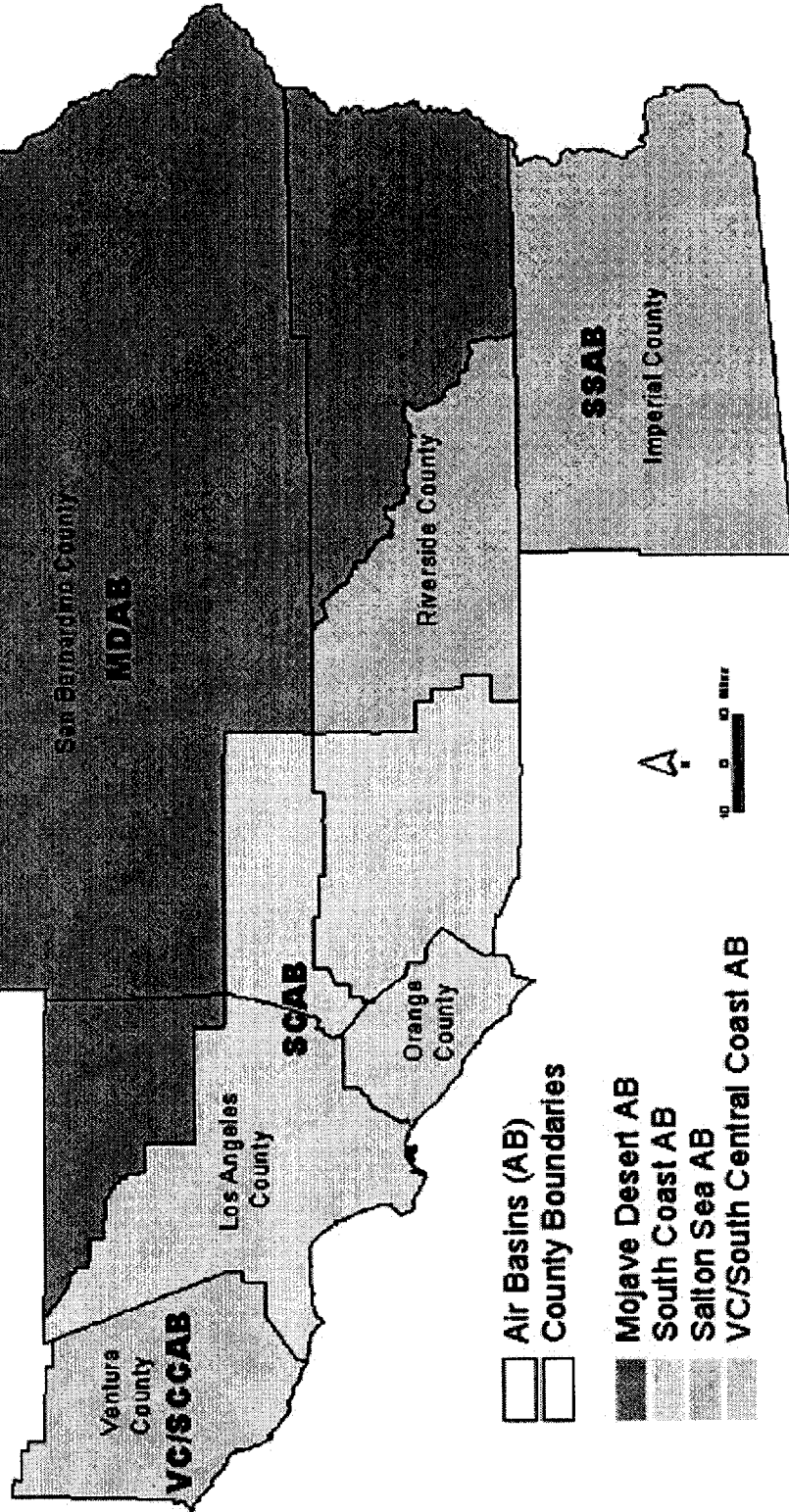
- Finding: SCAG's Draft 2004 RTIP regional emissions for the ozone precursors are consistent with all applicable emissions budgets for all milestone, attainment, and planning horizon years for the following areas:
 - SCAB - the 2003 Ozone SIP
 - SCCAB (Ventura County) - the 2004 Ozone SIP
 - Southeast Desert Modified area (the Antelope Valley area and San Bernardino County and the Coachella Valley area) - the 2004 Ozone SIP

- Finding: SCAG's Draft 2004 RTIP regional emissions for the NO₂ precursor are consistent with all applicable emissions budgets for all milestone, attainment, and planning horizon years in SCAB - the 2003 NO₂ SIP.
 - Finding: SCAG's Draft 2004 RTIP regional emissions for CO are consistent with all applicable emissions budgets for all milestone, attainment, and planning horizon years in SCAB - the 2003 CO SIP.
 - Finding: SCAG's Draft 2004 RTIP regional emissions for the PM₁₀ precursors are consistent with the applicable emissions budgets for all milestone, attainment, and planning horizon years in SCAB - the 2003 PM₁₀ SIP.
 - Finding: SCAG's Draft 2004 RTIP regional emissions for PM₁₀ are consistent with the applicable emissions for the Coachella Valley portion of SSAB for all milestone, attainment and planning horizon years - the 2003 PM₁₀ SIP.
 - Finding: SCAG's Draft 2004 RTIP regional emissions (build scenarios) for PM₁₀ are less than the no-build emissions for the San Bernardino County portion of MDAB for all milestone, attainment and planning horizon years.
 - Finding: SCAG's Draft 2004 RTIP regional emissions (build scenarios) for PM₁₀ are less than the no-build emissions for the Imperial County portion of SSAB.
 - Finding: SCAG's Draft 2004 RTIP regional emissions (build scenario) for the ozone precursors are less than the no-build emissions for the Imperial County portion of SSAB.
- ✓ **Timely Implementation of TCM Test**
- Finding: The TCM1 project categories listed in the 1997 (as amended in 1999) Ozone SIP for the SCAB area were given funding priority and are on schedule for implementation.
 - Finding: The TCM strategies listed in the 1994 (as amended in 1995) Ozone AQMP/SIP for the VC/SCCAB were given funding priority and are on schedule for implementation.
- ✓ **Financial Constraint Test**
- Finding: All projects listed in the Draft 2004 RTIP are financially constrained for all fiscal years.
- ✓ **Inter-agency Consultation and Public Involvement Test**
- This test will be completed in the Final 2004 RTIP.

EXHIBIT A: MAPS

- Air Basins
- Air Districts
- Federal Non-attainment Areas
(ozone, PM₁₀, CO, NO₂)

Air Basins in the Region



Source: Cal Air Resources Board and Air Districts

Map of Southern California Air Districts and County Boundaries

Legend:

- Air Districts
- County Boundaries

Air Districts (Shading Patterns):

- Antelope Valley AVAQMD
- Imperial County APCD
- Mojave Desert AQMD
- South Coast AQMD
- Ventura County APCD

Counties and Air Districts:

- San Bernardino County:** MDAQMD
- Los Angeles County:** SCAQMD
- Orange County:** SCAQMD
- Riverside County:** SCAQMD
- Imperial County:** ICAPCD
- Ventura County:** VCAPCD
- Antelope Valley:** AVAQMD

Scale: 0 to 10 Miles

North Arrow: ↑

County Boundaries

Ventura County APCD

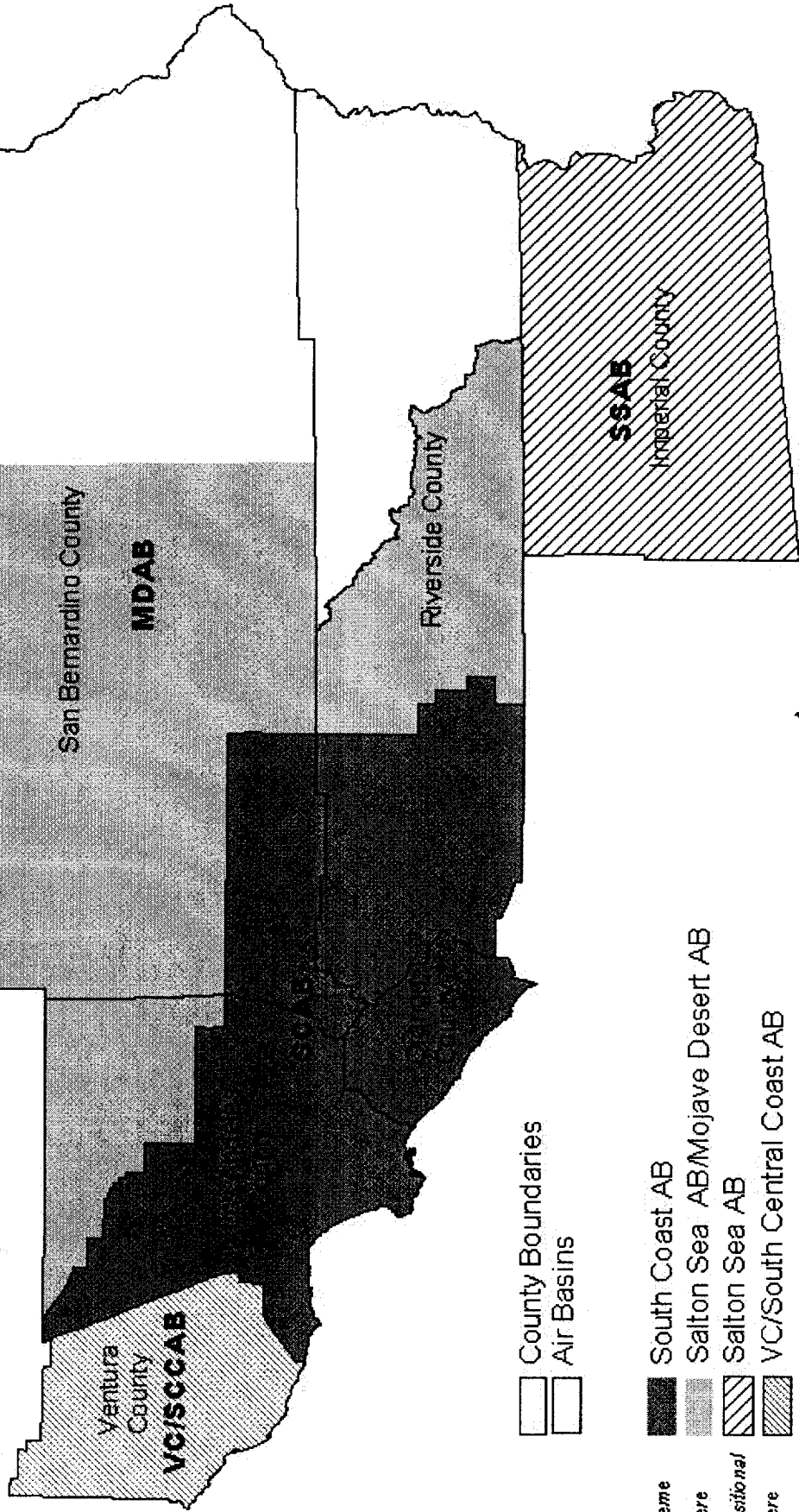
Source: Cal Air Resources Board and Air Districts

AQMD: Air Quality Management District

**SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS**

Federal Non-attainment Areas in the Region

Ozone
(1-Hr. Standard)



10 0 10 Miles

SOUTHERN CALIFORNIA
ASSOCIATION OF GOVERNMENTS



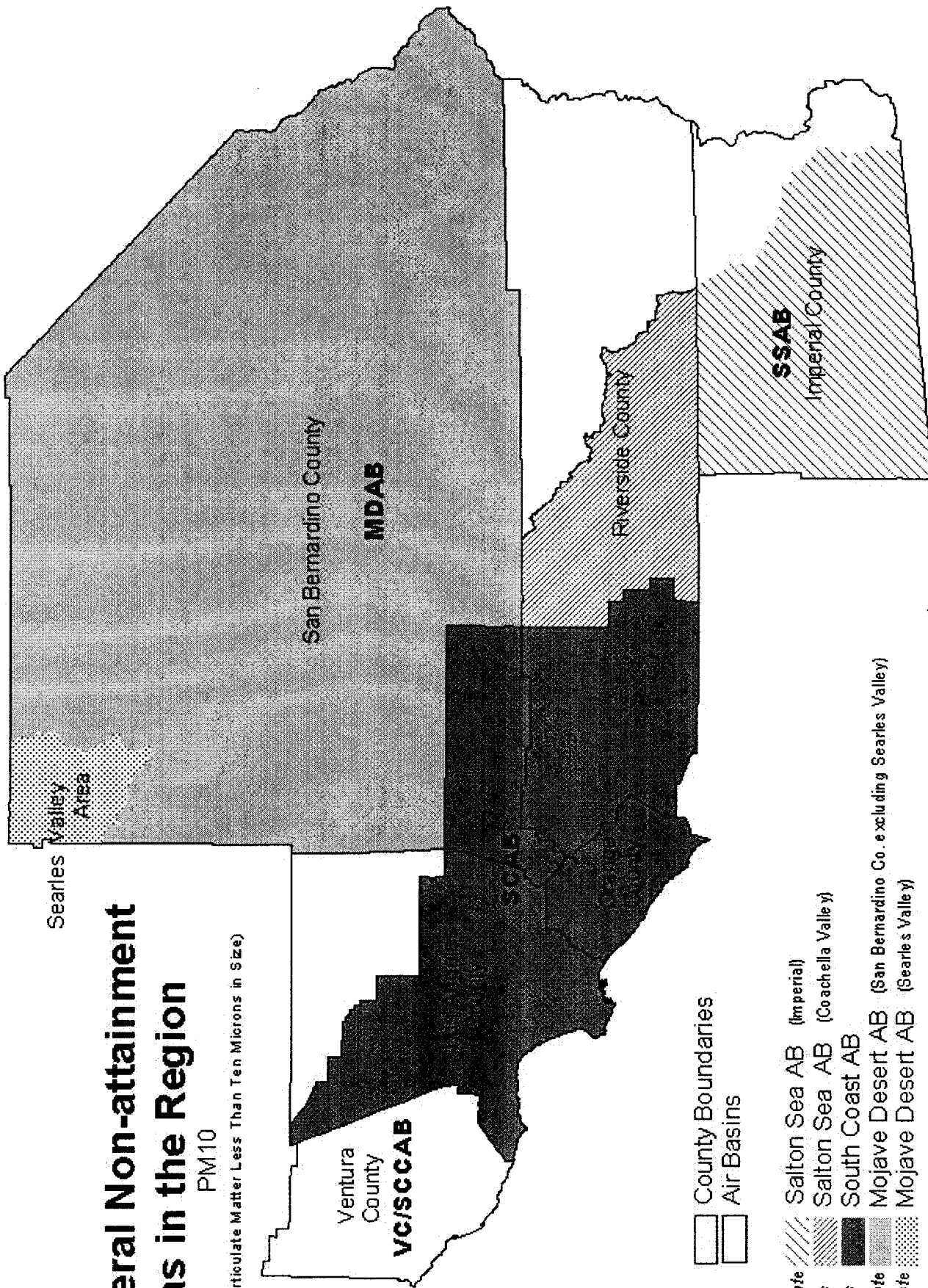
OCTOBER 2003

Source: Cal Air Resources Board and Air Districts

Federal Non-attainment Areas in the Region

PM10

(Particulate Matter Less Than Ten Microns in Size)



Source: Cal Air Resources Board and Air Districts

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San Bernardino County

MDAB

Ventura
County

VCISCCAB

Los Angeles
County

154

Orange County

Riverside County

SSAB
Imperial County

South Coast AB

Source: Cal Air Resources Board and Air Districts



| 10 | 0 | 10 Miles |
|----|---|----------|
| 10 | 0 | 10 Miles |



**SOUTHERN CALIFORNIA
ASSOCIATION OF GOVERNMENTS**

October 2006

VC/SCCAB

Ventura County

MDAB

San Bernardino County

SCAB

Los Angeles County

Orange County

Riverside County

SSAB

Imperial County

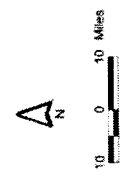
South Coast AB

County Boundaries

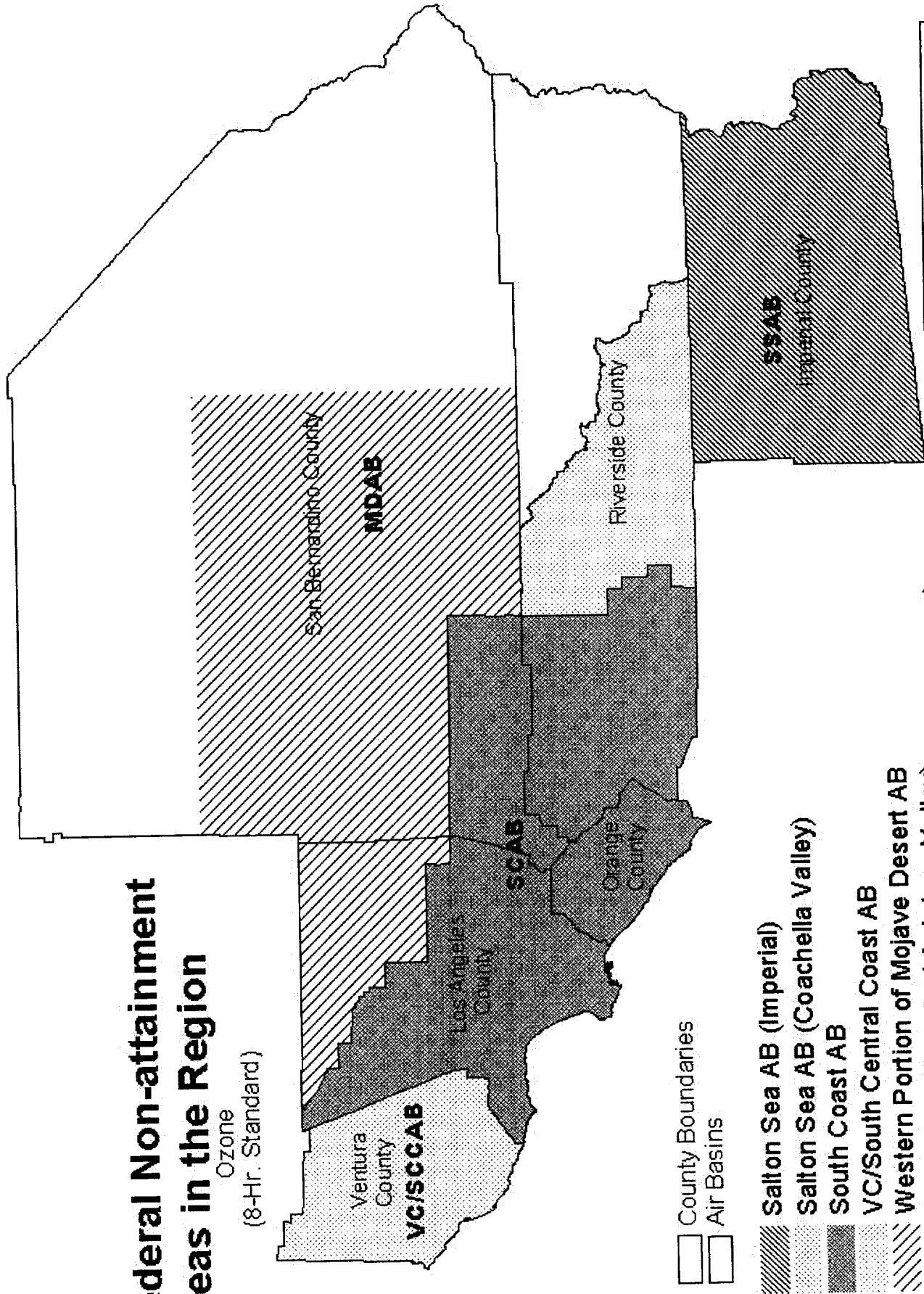
Air Basins

Source: Cal Air Resources Board and Air Districts

Source: Cal Air Resources Board and Air Districts



Federal Non-attainment Areas in the Region

Ozone
(8-Hr. Standard)

☐ County Boundaries

☐ Air Basins

Salton Sea AB (Imperial)
Salton Sea AB (Coachella Valley)

South Coast AB

VC/South Central Coast AB

Western Portion of Mojave Desert AB
(San Bernardino and Antelope Valley)

△=

10 0 10 MILES